

STATEMENT OF SENATOR JOHN McCAIN
TRANSITION TO HDTV HEARING
JULY 8, 1998

Good morning. I thank the panel of witnesses who have agreed to be with us today to discuss the transition to digital TV. This is a complex and frankly troubled area, and I appreciate the time they have taken to be with us today.

Digital television is a technology with enormous promise. It will some day provide Americans with an array of services unavailable from conventional television broadcasting: crystal-clear pictures and sound, interactivity, and Internet-based services. Rather than merely *watching* television, we can *participate* in television. Imagine last night's All-Star game broadcast with such stunning clarity that you seem to be watching it through a window rather than on a screen. Or imagine being able to choose the camera angles you prefer, or calling up information on any subject you want as the game goes on. Those are only some of the features that digital television can provide.

Converting the nation's television system to digital transmission also entails enormous challenges. The broadcast industry's challenges are the most obvious. Having been given their digital broadcast spectrum, they must acquire equipment, build towers, and figure out how to use the spectrum they have been given -- under an aggressive implementation schedule and in an environment in which the acceptance of viewers, the technical capabilities of receivers and antennas, and even the behavior of the digital signals themselves, is uncertain.

These challenges are daunting in and of themselves, but they're by no means the *only* ones involved in the conversion to digital TV.

Today, close to 70 percent of all American households get their television service through cable rather than off-air. This makes the cable television industry a key determinant of the broadcast industry's success or failure in converting to digital. The cable television industry must upgrade the digital capability of its systems and make sure its own digital transmission standards work compatibly with the different broadcast standards. It must make sure that it installs technology that will allow subscribers to view digital broadcasts *with* cable exactly as they would view them *without* cable. And it must grapple with the issue of how to accommodate new digital channels on cable systems whose channels may already be fully occupied by programming that subscribers don't want dropped.

Then, of course, there is the equipment manufacturing industry -- the companies that make TV sets and other consumer video equipment like VCRs, camcorders, DVDs, and satellite TV dishes. All of these devices must be made to work seamlessly in the new digital environment, especially in its early days when consumer acceptance is so important to driving the conversion process forward.

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And, of course, there is the program production industry. Program producers must cooperate in making sure that digital video programming is available to viewers who choose to buy new digital TV receivers.

It would be pleasant to say at this juncture that these challenges are being met, all the problems are being solved, and digital broadcasting is poised to make what the former Chairman of the Federal Communications Commission, Reed Hundt, called "an impressive entry." But that would be misleading. Because, as things stand now, starting later this year digital TV sets are going to be sold, and digital TV broadcasts are going to commence, before some very pressing technical problems are solved.

Our witnesses will elaborate on these problems in detail. For now, I will simply highlight a few that are making Reed Hundt's dreams look more like Rube Goldberg's nightmares.

In the first place, consumers who buy digital TV sets and plan to watch digital TV off-air have to understand that, with digital TV, it's all or nothing. When digital signals experience interference, the picture doesn't get fuzzy -- it disappears completely. Because the new digital TV stations will occupy UHF frequencies, all the things that interfere with UHF TV reception today -- airplanes, rain, wind, even people walking across the room -- could also interfere with digital TV reception, and if that happens, the viewer will receive nothing. Recent over-the-air experiments showed discouraging results with currently-available off-air antennas, whether mounted inside or outside the house. Experts are split on how widespread this problem is likely to be. In the meantime, could technology be installed inside the digital TV set to fix the interference problem? Sure -- but so far the consumer electronics industry hasn't installed it.

Nor does connecting the set to a digital cable system solve the problem. Because development of the wire connecting the cable system's digital inputs to the digital TV set isn't yet complete, a digital TV set will receive digital signals carried by the cable system -- but the picture will be no different than what they would have gotten on their old TV set.

Then, of course, whether the new digital set is hooked up to cable or not, there's the minor inconvenience of finding that no other video equipment -- whether it's a VCR, a satellite dish, a DVD, or a camcorder -- will work with it. At best, you'll need new adapters and converters and the like to make it work.

Even those who choose to wait for things to stabilize before buying a new digital TV won't be immune from difficulties, either. The 70 percent whose sets are currently connected to cable can have an advanced cable set-top box installed, but it will only enable them to receive digital signals in ordinary signal quality. They will not be able to

receive high-definition digital broadcasts at all. And all cable subscribers face the possibility of losing valued channels of cable programming as the price of their systems' having to accommodate all their local broadcasters' new digital channels.

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Call this whatever you want, but it hardly qualifies as a success story in the making. It is long past time for the American public to hear about the problems they will experience in the rollout of digital TV, the impact these problems may have on the ultimate success of the conversion process, and how these problems can best be solved.

In closing, let me make a couple of observations. In pointing out these problems I am not unmindful of the intensive efforts that these industries have exerted in making digital TV a reality. Nor do I underestimate for one moment the difficulty of the remaining problems, or would I suggest that the government now ought to step in and immerse itself in micromanaging every bit and piece of this process. Government isn't very good at that -- witness the success of the government's last efforts at micromanaging telecommunications, the Telecommunications Act of 1996.

Frankly, I think it's government that has given you the problems you now face. The Clinton-Gore FCC has accelerated the digital conversion schedule and paid little attention to any issue other than trying to prescribe the kinds of programs that broadcasters ought to show on the new digital channels. Vice President Gore has established a twenty-odd member commission just to propose new digital programming requirements. It's ironic that those who are so eager to micromanage the programming on these channels have failed to exert even minimal efforts to assure that the channels that will carry the programming become available to consumers in an orderly, sensible way.

In closing, let me return briefly to the subject of the 1996 Telecom Act, because I believe its failures can teach us a valuable lesson while we watch many of the same industries involved in the passage of the Act grapple with the conversion to digital TV.

The lesson we should have learned from the failure of the 1996 Telecom Act is that the interests of major telecommunications companies and average American consumers are often similar, but rarely the same. Where the interests of the industries and the interests of consumers diverge, Congress must assure that the interests of consumers come first. The failures of the Telecom Act show what happens when Congress first fails to see where the interests of industry are incompatible with the interests of consumers, and then fails to *act* once it does.

I do not intend that we repeat either of these mistakes as we begin to see the conversion to digital TV unfold.

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